A systems biology approach to study high-grade osteosarcoma

1. The association of the number of macrophages with prognosis is a rationale for adjuvant treatment of high-grade osteosarcoma patients with muramyl peptide (this thesis).

2. A highly significantly differentially expressed gene with low fold change is biologically more interesting than a non-significantly differentially expressed gene with high average fold change (this thesis).

3. A signal transduction pathway is deregulated when a higher number of genes are significantly differentially expressed than expected by chance (this thesis).

4. In order to detect driver genes of tumors with a complex genomic profile, the integration of different data types is indispensable (this thesis).

5. In the next 5–10 years, new agents will be included in innovative treatment strategies for selected subgroups of high-grade osteosarcoma patients (Hattinger et al., Expert Opin Emerg Drugs. 2010 Dec;15(4):615–634).

6. In half of all published microarray studies, statistical analysis is not properly conducted (Dupuy et al., J Natl Cancer Inst. 2007 Jan 17;99(2):147–157).

7. To be confident of identifying a driver gene that is present in 5% of a particular type of cancer will require hundreds of cases to be analyzed (Adapted from Stratton et al. Nature. 2009 Apr 9;458(7239):719–724).

8. Science should be shared: “If it doesn’t spread, it’s dead”
   —Prof. dr. H. Jenkins (henryjenkins.org, 2009 Feb 11)

9. “Realists do not fear the results of their study”
   —Fjodor Dostojevski (1821–1881)

10. “What good is knowledge and wisdom if you cannot use it?”
    —Erasmus (Quest for Glory series, Sierra On-line)

11. “Partim cognosco”
    —Prof. dr. P.J. Kuijjer (1921–2002)

12. “See the music, hear the dance”
    —George Balanchine (1904–1983)